



KARO ECHO Newsletter

KARO ECHO

Serving the communities
of El Cerrito and
Kensington, California

Web: www.karoecho.net

Facebook:
[KARO ECHO facebook](#)

Email: info@karoecho.net

Important Frequencies

KE Primary: 146.415 MHz
Weekly Net, Thurs. 1900

KE Secondary: 146.475 MHz

4Cs Repeater: 145.110 MHz
(TX down 600 with PL 82.5)

Monthly Meetings

In-person meetings

2nd Monday of each month
7:00 pm

(online via Zoom also)

Kensington Comm. Center,
59 Arlington Blvd,
Kensington, CA

The next meetings are:

Mar. 13th, 2023

Apr. 10th, 2023

Meeting minutes are on
the website in the past
events page.

What's New

KARO ECHO Monthly Meeting, Mar. 13th, 1900 — In-person or Zoom

The monthly KARO ECHO meeting will be **in-person or virtual (Zoom)**, at 1900, Monday Mar. 13th. The speaker will be Dan Goldstein KJ6KEU the ARRL East Bay Section Emergency Coordinator, for background you can review his 9/10/2022 presentation entitled [EmComm Mutual Aid in a Digital World](#) [Full agenda link](#).

KARO ECHO SET April 22, 10am — noon

The KARO ECHO spring SET will be Saturday morning April 22, 10am to noon. Please hold the date and plan to participate. It is a great opportunity to practice passing messages and working on a busy net frequency. As in past SETs, we will emphasize passing written forms messages on auxiliary frequencies to the net frequency. New this year will be practicing handling welfare traffic and a demonstration of passing those messages through to internet email (such as to a distant relative) using the Winlink system to bring radio digital traffic to a distant internet connection (assuming the local internet and phone and texting will not be available in a major disaster).



Potential Operating Shack Location at UUCB

Because of the need to relocate a Kensington CERT tough shed from its current location, there is a potential opportunity to create a club operating location and disaster communication hub at the Unitarian Universalist Church of Berkeley (UUCB), on the El Cerrito/Kensington border near Moeser and Arlington, in partnership with EBARC (Easy Bay Amateur Radio Club).

QSO Today Virtual Ham Expo

The [QSO Today Virtual Ham Expo](#) returns March 25-26, 2023. It has a modest registration of \$15 and the [growing list of presentations](#) can be viewed both live and as recordings afterward. There are other virtual Expo features to explore.



LOCAL NETS**KARO ECHO Simplex Nets**

146.415 MHz (primary)

146.475 (secondary)

Voice net: Thursday, after the West Contra Costa RACES Net, but not before 1900 hours local time.

Digital net: Monday, 1900

West Contra County ACS/RACES Net

145.110 MHz repeater
(TX down 600 with PL 82.5)
Thursday: 1845 local time

Contra Costa County HF EmComm/RACES Net

3893 KHz. Thursday, 1835

American Red Cross of the Bay Area (ARCBA)

WW6BAY Repeater
443.975 MHz
TX +5 MHz, PL 100 Hz
Wednesday: 2000 local time

BOARD MEMBERS

President: Howdy KE6BEE
Vice-Pres: Frans KJ6IUV
Treasurer: Annette KJ6SWK
Secretary: Tom KN6BUY
Em. Coor: Howdy KE6BEE
Outreach/PR Manager:
Blake KN6CMP
Web-maestro: Rob K6RJM
Board member at large:
Hal KK6NDF
Net Manager and Newsletter
Editor: Howdy KE6BEE

What's New *(continued)***First Wed. Neighborhood nets and Communication Hub Activities**

West county EmComm net out of Richmond at 11 am (starts after the Richmond siren test) FRS/GRMS simplex (on Ch.19, secondary Ch. 17), followed by a ham net on the WA6KQB 440 repeater with WA6DUR repeater as secondary (see WA6DUR freq. information below)

East Richmond Heights, ham operators check-in at 1845 on Walt's WA6DUR repeater 442.150 +5 offset and PL tone 107.2Hz.

EC4 (central El Cerrito Hills) CERT Net, Ch. 2 (462.5875), at 1845

EC9 (north El Cerrito Hills) CERT Net, Ch. 15 simplex (462.550), at 1900

East Richmond Heights, Ready-2-React Net, Ch. 7 (462.7125), at 1930

EC7 and EC8 (north El Cerrito) CERT net, Ch.4 (462.6375), at 2000

Ken6 (SW Kensington) CERT net, on first Tuesdays, Ch. 6 (462.6875) at 1900

Richmond simulated EOC net, first Thursdays at 1030, on three simplex frequencies in this order: 147.450, 441.000, 223.400

Albany Radio Net, Wed. (weekly) 1900 on Ch.19 [Albany Radio groups.io](http://AlbanyRadiogroups.io)

[Coordination of neighborhood FRS/GMRS frequencies can be found here.](#)

New Local Ham Licenses

New El Cerrito licenses issued: none for this month

New Kensington licenses issued: none for this month

Digital Net, Wed. 3/15, 1930

Because of the member meeting on Monday, the digital net will be on Wed. 3/15, at 1930 on 146.415. We welcome all digital operators wishing to practice and discuss FLdigi/FLmsg, packet, VARA and more.

Action - Contribute to this Newsletter

Content for this newsletter is always welcome. We are seeking submissions for a new free classified section for selling/trading radio equipment/services. Anyone with events or other content suggestions please send them to the newsletter editor Howdy ke6bee@arrl.net

What's New *(continued)*

New HF Material on the Website

Thanks to Don NI6A for posting some new documents on the KARO ECHO website. Topics include: HF antennas, propagation and noise reduction and using Software Defined Radio (SDR) receivers available on the internet (a good way to start playing with HF before you have a radio of your own).

[Short Introduction to HF Antennas and Propagation](#)

[Near Vertical Incidence Skywave \(NVIS\) antennas](#) for short range (short skip)

[Introduction to HF, Short Wave, and SDR Listening](#)

[Reducing RF Noise Interference on HF \(the High Frequency bands\)](#)

2023 KARO ECHO Survey

Please take a few minutes to [provide feedback through this online survey](#). It will help inform our training, meetings, nets, SETs, events, etc. We really hope for a high number of responses, whether you are currently active or not. We'd like to know what you think, and make KARO ECHO an even better group.

Online payments to KARO ECHO

It is now possible to pay KARO ECHO membership online through PayPal. No PayPal account is required. Use the [donate button on the KARO ECHO home](#) page, or under the heading "[Get Involved—Join](#)". Your dues and donations are the source of funds for our ongoing costs of operation, as well as installing equipment we need to have in place for effective emergency operations. Currently, we are planning to install additional antennas and patch boxes in El Cerrito and Kensington to give easy outdoor access to high quality communication for operators deployed various public spaces.

Donate



| KARO-ECHO Treasurer's Report | | | | |
|--|---------|----------|-------------------|--------|
| As of March 11, 2023 | | | | |
| | Credits | Debits | Bank Balance | Notes |
| Balance Forward | | | \$2,185.08 | |
| Since last report: | | | | |
| Liability Insurance | | \$200.00 | \$1,985.08 | |
| Memberships | | | | |
| | \$30.00 | | \$2,015.08 | KK6NDF |
| | \$40.00 | | \$2,055.08 | KM6HBO |
| | | | | |
| Balance 3/11/23 | | | \$2,055.08 | |
| 28 Total paid members to date for 2023 | | | | |

Activities

Weekly Net Control Rotation

Thanks go out to the volunteer stations who have been taking turns as Net Control Stations (NCS) each Thursday. This rotation has been working very well and everyone has been doing a great job. The regular NCS roster has 9 operators. Fill-ins are sometimes needed and we can always add another to permanent rotation. Please volunteer to give it a try. [Download the new Net Script for NCS operators.](#)

Below are the **new scheduled dates** for each operator next year. The [KARO ECHO google calendar](#) also has these assignments and can be found at the bottom of the events page. Add to your electronic calendar By pressing the "+GoogleCalendar" button in the lower right.

Net control is a skill that many operators should have and regularly practice. Please contact Howdy ke6bee@arrl.net if you are interested in taking a net control assignment.

| Callsign | Name | Assigned Dates (skipped: Thanksgiving 11/23/2023) | | | | | | |
|----------|--------------------|---|-----------|-----------|------------|------------|-----------|-----------|
| KE6BEE | Howdy Goudey | 3/23/2023 | 5/25/2023 | 7/27/2023 | 9/28/2023 | 12/7/2023 | 2/8/2024 | 4/11/2024 |
| KK6NDF | Hal Graboske | 3/30/2023 | 6/1/2023 | 8/3/2023 | 10/5/2023 | 12/14/2023 | 2/15/2024 | 4/18/2024 |
| KM6HBO | Jamuel Starkey | 4/6/2023 | 6/8/2023 | 8/10/2023 | 10/12/2023 | 12/21/2023 | 2/22/2024 | 4/25/2024 |
| KN6BUY | Tom Fattaruso | 4/13/2023 | 6/15/2023 | 8/17/2023 | 10/19/2023 | 12/28/2023 | 2/29/2024 | 5/2/2024 |
| K6RJM | Rob McNicholas | 4/20/2023 | 6/22/2023 | 8/24/2023 | 10/26/2023 | 1/4/2024 | 3/7/2024 | 5/9/2024 |
| KE6HCE | Armando Picciotto | 4/27/2023 | 6/29/2023 | 8/31/2023 | 11/2/2023 | 1/11/2024 | 3/14/2024 | 5/16/2024 |
| KJ6IUV | Frans Kuypers | 5/4/2023 | 7/6/2023 | 9/7/2023 | 11/9/2023 | 1/18/2024 | 3/21/2024 | 5/23/2024 |
| KN6CMR | Susan Yeaman | 5/11/2023 | 7/13/2023 | 9/14/2023 | 11/16/2023 | 1/25/2024 | 3/28/2024 | 5/30/2024 |
| KK6ZPM | Karen Fenton-Leong | 5/18/2023 | 7/20/2023 | 9/21/2023 | 11/30/2023 | 2/1/2024 | 4/4/2024 | 6/6/2024 |

Thursday Net Training Exercises

Following the net check-ins every Thursday at 1900 on 146.415, KARO ECHO usually runs a training exercise to learn and practice skills that are important for successful disaster communications.

[A list of potential training exercises](#) is posted and maintained on the training page of the website.

[A log of our check-in counts can be found here.](#) Howdy KE6BEE typically updates this document in real time during the net, so you can check it against your log during or after the net.

For 2020: 1008 check-ins, avg. 21/week, high of 28, 72 unique callsigns

For 2021: 934 check-ins, avg. 19/week, high of 25, 55 unique callsigns

For 2022: 944 check-ins, avg. 19/week, high of 27, 59 unique callsigns, avg. 5 digital check-ins per week

For 2023: 201 check-ins, avg. 20/week, high of 23, 37 unique callsigns, avg. 6 digital check-ins per week

Thanks for your participation. Keep it up!

About KARO ECHO

KARO ECHO is the name of the Kensington Amateur Radio Operators and the El Cerrito Ham Operators mutual benefit association, an all-volunteer non-profit group of amateur radio operators providing auxiliary communications for the cities of Kensington and El Cerrito in the event of a disaster. KARO ECHO works with CERT (Community Emergency Response Teams) in Kensington and El Cerrito, but is not an official part of the CERT program.

Monthly in-person meetings of KARO ECHO are on the 2nd Monday of each month at 7:00 pm, in-person at the Kensington Community Center (KCC) as well as online using Zoom (hybrid meetings).

Yearly membership dues are \$30/year for individuals, \$40/year for a family membership. Payments can be given to the Treasurer at monthly meetings or mailed to the address below. Participation is welcome independent of paid membership, but only licensed amateur radio operators who are dues paying KARO ECHO members will be allowed to vote on KARO ECHO business. Dues cover our 510c3 registration, post office box, web page, station operating manuals and more. Your input on useful expenditures to aid emergency communications is welcome.

Mail to: KARO ECHO, PO Box 2025, 6324 Fairmont Ave, El Cerrito, CA 94530-3651

Please see our website for more information: www.karoecho.net

You can contact the KARO ECHO board by email: info@karoecho.net

KARO ECHO Facebook

The [KARO ECHO Group on Facebook](https://www.facebook.com/groups/1451216838315743/) has a lot of good information, more than is contained on our website. There is a whole wide world of emergency communications information at <https://www.facebook.com/groups/1451216838315743/> Check it out and be inspired of what we can do to help disaster victims in our community.

Weekly Training Net

The Karo-Echo Weekly Training Net meets every Thursday evening immediately after the West Co Co County RACES/ACS Net; but not before 1900 on 146.415 MHz Simplex. Our secondary frequency is 146.475 MHz simplex. Details at <https://www.karoecho.net/events>

Newsletter Content Wanted

Any input on content you'd like to propose for inclusion in the KARO ECHO newsletter can be sent to Howdy ke6bee@arrl.net We welcome all ideas for content including announcements, events, etc.

KARO ECHO Field Day Video

Thanks to Frans KJ6IUV for taking video and editing a nice [movie of Field Day activities](#).

Outreach, Education and Licensing

Local and Online Ham License Classes and Exams

Many ham license classes and exams are offered locally or entirely online. See a [list of opportunities on the KARO ECHO website](#)

Mutual Aid Presentation by Dan Goldstein

Daniel Goldstein KJ6KEU (the ARRL East Bay Section Emergency Coordinator and member of the Alameda County Sheriff's Communications Team) gave the presentation [EmComm Mutual Aid in a Digital World on Sept. 10](#).

ARRL Learning Network Webinars

Visit the [ARRL Learning Network](#) (a members-only benefit) to register, check on upcoming webinars, and to view previously recorded sessions.

Training for Beginning Operators

Jay KJ6WSS, Edward KM6UBY and Karen KK6ZPM gave an introductory radio class May 23rd 2020 introductory radio class, with emphasis on the GMRS radio BTECH-V1. [A recording of the class and other resources are available here](#).

Net Control Operator Training

Diane KK6RED, David KJ6AAT and Howdy KE6BEE taught an Apr 4th 2020 net control class. [The class recording is available here](#).

EMCOMM related videos

See the CERT SET Youtube video link

<https://www.youtube.com/watch?v=66DdgGLIn4c&list=PLROOaUIKdrEgSID1bQJZojW3PzfURoEY-&index=144&t=0s>

Post Camp Fire GMRS organization

https://www.youtube.com/watch?time_continue=220&v=aZiSC4sgKYw&feature=emb_logo

ELMERING

An online elmering forum can be accessed by emailing elmer@karoecho.net or browsing the associated google group. More in-depth elmering/mentoring is available by request.

In the meanwhile, please check out the plethora of useful information at <https://www.karoecho.net> website.

Encouragement to Monitor 146.415 and Explore Other Nets

It is always encouraged to monitor 146.415 (call out for others occasionally and make some casual contacts). A number of members have been having short impromptu nets following small earthquakes, power outages, etc. Everyone is encouraged to check-in for practice if you are available. There are a lot of other nets around the bay area that you can reach. Expand your radio horizons. See the [KARO ECHO Coordination page](#) for a listing of some other nets to explore. You can just listen at first, or program your radio (if a repeater is used) and try transmitting as a guest check-in to see if you can make contact.

KAROECHO.Net Website

Especially, check out the EVENTS Page (<https://www.karoecho.net/events>) and the WORKSTREAMS drop-down menu which will lead one to an extensive training page that provides online learning at your own pace. Everything from the very beginning to advanced EmComm operations is detailed. The RESOURCE page has many excellent outside links.

- ♦ This [new heading on the Events page](#) will be updated with recent additions to the website.
- ♦ If you are on Facebook, contribute to the KARO ECHO Facebook Group Page at <https://www.facebook.com/groups/1451216838315743/>
- ♦ If you haven't already filled out the **JOIN** form please do. Find it as a drop down menu under "Get Involved" See <https://www.karoecho.net/join>
- ♦ A [follow-through novice primer](#) has been put on the website for new hams once they have bought their radio and want to learn more.
- ♦ A [dual-band antenna primer](#) for new hams who want to graduate from the rubber-ducky world
- ♦ Note that the Tram 1480 gain dual band antenna is currently still available for \$51 (no tax and free shipping) on ebay or from Home Depot. That and an inexpensive speaker tripod is a dynamite combination for portable operation. This antenna is equivalent to the Diamond X-200a antenna which sells at HRO for \$125.00 before taxes and shipping.
- ♦ For newbies, please visit <https://www.karoecho.net/workstreams/training> and read the study materials. It is all there except for hands-on experience. Ask questions!
- ♦ Following the Thursday evening net check-in, there is often a training session and/or discussion.
- ♦ All recent KARO ECHO [Minutes will be found at our Past Events page](#) We are now including past Executive Board Minutes as well. [Newsletters are on the Documents Page](#).

If you desire to be removed from this email list, please email info@karoecho.net

Other Resources

"ALERTWildfire" camera links in our area:

[William Rust Summit cam](#)

[Wildcat Canyon cam](#)

[Vollmer Peak cam](#)

[Vollmer Tower Top cam](#)

[Pinole Ridge cam](#)

[View real-time data from any weather station in the state.](#)

[Zonehaven evacuation zone here by on this interactive map](#)

[Albany Radio Groups.io forum](#)

[Eastbay Resilience Groups.io forum](#)

[Marina Bay Neighbors and 1st Wed West county GMRS net](#)

The [HeyWhatsThat](#) website is an online tool that can map line of site paths with topography

To make it easy for amateurs to evaluate RF exposure,

ARRL provides an [RF exposure calculator](#) on its [RF Exposure page](#).

KARO ECHO Classifieds

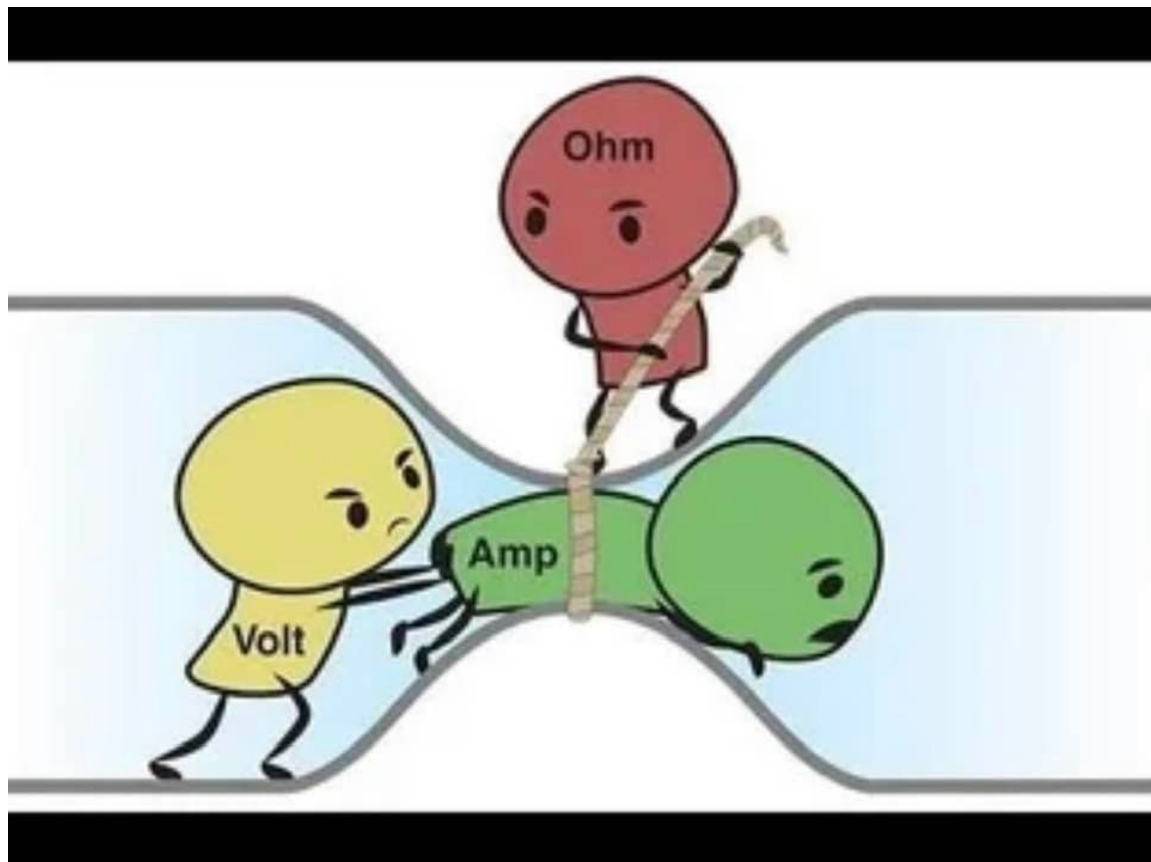
We are soliciting classified ads from KARO ECHO members, and friends, to facilitate gifting, swapping, selling radio gear and/or offering help/services such as loans of special equipment/tools, etc. Please send any content to the newsletter editor, Howdy ke6bee@arrl.net

Loaner radios/antennas/meters available for trial/testing, including:

HTs, larger mobile radios, gear for digital modes and mesh nodes, SWR/power meter

Contact: Howdy ke6bee@arrl.net

Available for free: B&K Precision 2120B oscilloscope - 20MHz bandwidth, dual trace, triggered sweep. Contact: Tom, KN6BUY, at tfat@sbcglobal.net



Visualizing Ohm's Law, courtesy of Tom KN6BUY